ABSTRACT OF THE DISCLOSURE

A chain tensioner comprising a housing, a plunger having racks formed on its opposite sides, a protrusion biasing spring, cams arranged in oblique guide grooves in the housing and engageable with the racks of the plunger, and a spacer supporting a cam biasing spring. The minimum backlash distance X is equal to h/tan $\theta$, where h is the height of the rack teeth, and $\theta$ is the angle of the cam guide surfaces relative to the protruding direction of the plunger. The angle $\theta$ is between $15°$ and $70°$. The tensioner prevents wobbling noises produced by a timing chain on starting an engine, prevents whistling sounds due to excess tensioning of the chain, and allows backlash to be readily set to accommodate the requirements of a wide variety of engines.